

# UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO. FILING DATE		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/733,533	10/733,533 12/11/2003		Blake C. Chenevert	EH-10965 (03-435)	7730	
34704	7590	10/28/2005	•	, EXAMINER		
	AN & LA	APOINTE, P.C.	COCKS, JOSIAH C			
SUITE 12		CC I		ART UNIT	PAPER NUMBER	
NEW HA	VEN, CT	06510		3749		
			•	DATE MAILED: 10/28/200	5	

Please find below and/or attached an Office communication concerning this application or proceeding.

## Advisory Action Before the Filing of an Appeal Brief

Application No.	Applicant(s)		
10/733,533	CHENEVERT ET AL.		
Examiner	Art Unit		
Josiah Cocks	3749		

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --THE REPLY FILED 11 October 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. 1. 🔀 The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods: The period for reply expires <u>3</u> months from the mailing date of the final rejection. b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f). Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). NOTICE OF APPEAL 2. The Notice of Appeal was filed on . A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a). AMENDMENTS 3. The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because (a) They raise new issues that would require further consideration and/or search (see NOTE below); (b) They raise the issue of new matter (see NOTE below); (c) They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or (d) They present additional claims without canceling a corresponding number of finally rejected claims. NOTE: ....... (See 37 CFR 1.116 and 41.33(a)). 4. The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324). 5. Applicant's reply has overcome the following rejection(s): 6. Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s). 7. X For purposes of appeal, the proposed amendment(s): a) 🔲 will not be entered, or b) 🛭 will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended. The status of the claim(s) is (or will be) as follows:

Claim(s) withdrawn from consideration:	
AFFIDAVIT OR OTHER EVIDENCE	

Claim(s) allowed: 26 and 27. Claim(s) objected to: 24 and 25. Claim(s) rejected: 12-16 and 18-23.

- 8. The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
- 9. The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
- 10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached. REQUEST FOR RECONSIDERATION/OTHER

11. [	☐ The request	for reconsideration	has been conside	ered but does NO	T place the application	n in condition for	allowance because:
40 5	- <del></del>		S. 1 S. 1	· · · · · · · · · · · · · · · · · · ·	NO - DTO 4440\ D	N - ( - )	

12.	Ш	Note the attached	Information D	isclosure (	Statement(s).	(PTO/SB/08 c	or PTO-1449)	Paper No	(s)
13.		Other:							

#### ADVISORY ACTION

Appended explanation of the rejection of the amended claims as specified in item 7.

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 3. Claims 12-16 and 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,277,153 to Kakabaker ("Kakabaker") in view of U.S. Patent No. 4,333,742 to Tanca ("Tanca") and Japanese Patent No. 2003-269887 ("Japanese patent") (submitted in IDS

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filed 5/19/2005) (noted: a computer translation of this document is included with this Office action)

Kakabaker discloses in Figures 1-4 a method for cleaning a vessel of a fuel burning power plat or similar boiler similar to that described in applicant's claims 12-16 and 18-23. In particular, Kakabaker describes a vessel that receives a soot blower device through an access opening (see col. 1, lines 14-20). The soot blower device includes an insertion portion that is inserted into the vessel and forms a seal by means of a seal-bearing arrangement (41). The soot blowing devices includes a valve (16) that is opened to release superheated steam into the vessel, after-which the device is withdrawn from the conduit (see col. 6, line 53 through col. 7, line 5). Valve (16) is considered to be the second valve recited in applicant's claims.

In regard to the recitation of a first valve, Kakabaker does not provided any detail as to a mechanism or valve with means for sealing off the soot blower from the vessel when the soot blower is withdrawn. However, the Japanese patent is cited to remedy the deficiency. The Japanese patent shows a retractable soot blower in the same field of endeavor as Kakabaker. In the Japanese patent, a valve (3) is included between a vessel and the soot blower (see Fig. 1). This valve is termed an insertion latching valve (see computer translation paragraph [0049]) that functions to seal the soot blower from a vessel when the soot blower is retracted (see translation, paragraphs [0035] and [0052]). Alternatively, the masking door (35) meets the limitation of applicant's valve. This masking door (35) is further shown to be a pivoting type assembly. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Kakabaker to incorporate a valve as taught in the Japanese patent to desirably seal off the soot blower from a vessel when the soot blower is retracted.

In regard to claim 16, OFFICIAL NOTICE was taken in a prior Office action (mailed 3/10/05) that valves being manually opened are well known in the art. The examiner stated that a person of ordinary skill in the art would reasonably select well known valve types for those disclosed in Kakabaker. This knowledge in the art of manual valve operation was not disputed by applicant and is now considered to be admitted prior art.

In regard to the limitations of the claims pertaining to timed opening of the valves, the examiner considers that the valves would be opened and closed as necessary to accomplish the purpose of cleaning the vessel. A person of ordinary skill in the art would select appropriate valve opening times through routine experimentation in order to optimize the cleaning process. Therefore, the selection of an optimum time for opening the valve would be is not patentably distinct. See MPEP § 2144.05(II)(A).

Kakabaker discloses the use of superheated steam as the cleaning fluid, but possibly does not disclose the use of combustion gases as recited in applicant's claims.

Tanca teaches a soot blower in the same field of endeavor as Kakabaker. In Tanca, a soot blower employs combustion fuel gases for cleaning (see col. 1, line 57 through col. 2, line 8).

Tanca also acknowledges that it is under stood in the art that combustion product/flue gases may also be used as the cleaning fluid (see col. 1, lines 23-27). These combustion fuel gases and combustible produce gases disclosed are considered to be the combustion gases, and fuel/oxidizer mixture claimed. Further, these combustion fuel gases would serve to "detonate" when ignited

Therefore, in regard to claim 12-23, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the method of cleaning step of using

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superheated steam of Kakabaker to incorporate the step of using either combustion fuel gases or combustion product/flue gases as taught by Tanca as such gases are understood in the art to be satisfactory in dislodging built-up residue (see Tanca, col. 1, lines 23-27) and in the case of combustion fuel gases, desirably preserve the heating value of the fuel gas when the device is used in a coal gasifier (see Tanca, col. 3, lines 3-9).

## Allowable Subject Matter

- 4. Claims 26 and 27 are allowed
- 5. Claims 24 and 25 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

## Response to Arguments

6. Applicant's arguments filed 10/11/05 have been fully considered but they are not persuasive.

Applicant first argues that the valve (16) of Kakabaker when combined with the other references relied upon would not function as applicant's valve, stating:

"the valve 16would be come a valve that holds back combustion gases in the combustion. There is no suggestion for such a valve. In the combination, Kakabaker's valve 16 would be replaced by whatever valve(s) of Tanca admit the fuel to the conduit. Such a valve would be located upstream not downstream of the location of combustion." (10/11/05 response, p. 7)

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The examiner does not agree. Tanca is relied upon to show that a soot blower may include combustion gases for cleaning. The combination of these references does not call for modification of the structure of valve (16) in Kakabaker merely for the use of combustion gases passing through this valve as the cleaning fluid. As noted above, the valve of Kakabaker would continue to function as stated in Kakabaker in supplying a fluid for cleaning a vessel.

Applicant also argues there is no suggestion to control the timing of the valve openings as specified in claims 13, 19, 20, and 21. The examiner disagrees and maintains reliance on MPEP § 2144.05(II)(A) in finding that a person of ordinary skill in the art would understand that the opening of valve (16) of Kakabaker in order to release a fluid for cleaning would be a matter of routine experimentation to optimize the cleaning. Note that Kakabaker does not specify a specific period when the valve is opened only stating that it is opened "typically shortly after forward advancing movement of the lance 13." (see Kakabaker, col. 6, lines 53-55).

Applicant also argues that there is no sealing arrangement in the prior art relied upon that corresponds to that claimed by applicant. Particularly applicant points to the rod type seal assemblies 58 and 59 of Kakabaker as not constituting forming a seal between the access conduit and the combustion conduit as claimed. However, the examiner notes the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, the examiner has also pointed to the Japanese patent to show a first valve and claimed and specifies that such a valve includes means for sealing (see

translation, paragraphs [0035] and [0052]). Applicant recitation of the sealing step is considered to read on the combination of these references as applied.

Applicant also argues that there is no suggestion of the step of initiating combustion upstream of the second valve. However, in combining the teachings of Kakabaker and Tanca the examiner considers that passing combustion product gases as taught in Tanca through the valve (16) of Kakabaker would necessarily result in the production of this combustion produce gases upstream of the valve (16) through which the gas is passed.

Applicant further argues that the additional steps of claim 23 are not shown in the prior art. However, the examiner considers that the valve (16) of Kakabaker is clearly formed at an upstream portion of the insertion portion (see e.g. Fig. 1) and that conduit portions (e.g. 15) are present, and therefore considered installed, after insertion of the soot blower assembly.

## **USPTO** Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Josiah Cocks whose telephone number is (571) 272-4874. The examiner can normally be reached on weekdays from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ehud Gartenberg, can be reached at (571) 272-4828. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://portal.uspto.gov/external/portal/pair">http://portal.uspto.gov/external/portal/pair</a>. Any questions on access to the Private PAIR system should be directed to the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

jcc

October 17, 2005

JOSIAH COCKS

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